REMARKS

Claims 1-9 are pending in this application. The Examiner rejects claims 1-3 and 6-9 under 35 U.S.C. § 102(e) as being anticipated by Rotstein et al (Rotstein), and claim 4 and 5 under 35 U.S.C. § 103(a) as being unpatentable over Rotstein in view of Boch.

Applicant amends independent claim 1 more clearly to recite the features of Applicant's invention.

Applicant respectfully traverses the Examiner's prior art rejections as follows.

Applicant's invention provides a method of reducing interference and is applicable (but is not limited) to radio access networks having local multipoint distribution systems (LMDS) where a user terminal receiving transmission from its base transceiver station (i.e., a downlink channel user) experiences interference from transmissions originating from other base transceiver stations which are geographically aligned along the line of transmission between the user terminal and its base transceiver station (see Applicant's Fig. 6). Applicant's invention is also applicable to interference experienced by uplink channel users (see Applicant's Fig. 5).

In particular, Applicant's invention provides a Code-Division Multiple-Access (CDMA) spread spectrum coding method where, depending on the geographic location of the user terminal with respect to its base transceiver station, messages from the base transceiver station are transmitted to the user terminal with each symbol coded with either a single coding sequence (a coding sequence of 2N bits to produce sequences of 2N chips) or a multiple coding sequence (a coding sequence of k2N bits to produce sequence of k2N chips, where k is an integer greater than 1). That is, in order to reduce interference experienced by user terminals located in certain

geographical areas, messages transmitted to these user terminals are coded with multiple redundancy **when these user terminals experience higher interference, or when these user terminals are expected to experience higher interference**.

Rotstein is in the relevant field of Code-Division Multiple-Access cellular communication systems, and disclose a method and an apparatus for spreading and dispreading data in a spread-spectrum communication system operating in direct-spread and multi-carrier transmission modes. In particular, Rotstein addresses the expense of having to use multiple spreaders in multi-mode transmitters (see Id., Fig. 1), by providing a Walsh spreader which, based on the current mode of operation, either varies a Walsh code at a symbol rate, or holds the Walsh code constant (see Id., col. 2, lines 19-52).

That is, according to Rotstein:

> a current mode of operation is provided to Walsh spreader 203, and based on the current mode of operation, spreader 203 either varies a Walsh code at a symbol rate, or holds the Walsh code constant. During multi-carrier transmission a first symbol within data stream 210 is spread with a first Walsh code, while symbols immediately preceding and following the first symbol is spread by a another, differing Walsh code. Additionally, in the preferred embodiment of the present invention during multi-carrier transmission all Walsh codes comprise 256 chips. During direct-spread transmission, a single Walsh code is utilized to spread all symbols within data stream 210. In the preferred embodiment of the present invention, the Walsh code utilized for direct-spread transmission comprises 64 chips. (Id., col. 4, lines 12-26; see also Id., col. 4, line 27 through col. 6, line 20; and Figs. 2-4.)

Nowhere does Rotstein disclose, teach or suggest that the choice of multi-carrier transmission mode or direct transmission mode has anything to do with the relative geographic position of a user terminal with respect to its base transmitter station, or with the level of interference experienced by the user as a function of, for example, such position. In fact,

Rotstein does not even mention the interference problem, let alone teach or suggest using a multiple code sequence to remedy the interference. Thus, in contradistinction to Applicant's claimed invention, Rotstein discloses the use of the same Walsh code for all multi-carrier transmissions (e.g., 256 chips), and the same Walsh codes for all direct-spread transmissions (e.g., 64 chips), regardless of the geographic location of the user terminal with respect to its base station, or the level of interference experienced by the user terminal.

Since Rotstein does not disclose or suggest at least the step of coding symbols of messages to a user terminal with a multiple coding sequence (k2N bits to produce sequences of k2N chips, where k is an integer greater than 1) **when these user terminals experience higher interference, or when these user terminals are expected to experience higher interference**, Applicant's amended independent claim 1 and its dependent claims 2, 3 and 6-9 (which incorporate all the novel and unobvious features of their base claim) are not anticipated by (i.e., are not readable on) Rotstein at least for this reason.

With regard to Applicant's dependent claims 4 and 5, Boch discloses the use of sectorized polarization diversity in cellular wireless systems, and does not supply the above-noted deficiencies of Rotstein. Therefore, the dependent claims 4 and 5 (which incorporate all the novel and unobvious features of their base claim 1) would not have been obvious from any reasonable combination of Rotstein and Boch at least for the reasons set forth above with regard to claim 1.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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